Julie,

Here are my comments regarding the June 21, 2015 public draft of the Model Water Efficient Landscape Ordinance June 12, 2015. I hope you are the person I should be submitting these comments to and if not you can pass them on to the appropriate person/people. If not please notify me where I should send my comments.

Note that the comments made below are from an expert in soil management and ecologically sound, regenerative horticulture.

§ 492.5 Soil Management Report.

It is a good idea to require a soil management report however I suspect most members of the horticulture industry have no idea what a soil management report should include or the purpose of such a document. I think this portion of the document requires more leadership.

The document requires a soil analysis but does not require any specific tests. Why bother requiring a soil analysis if there are no specific items that must be tested for, analyzed and recommendations made. In section 3 your document says the soil analysis must be made available to the horticultural professionals working on the project. What good is a soil report when specific items are not required to be included? The Soil analysis must (not may) include soil texture, infiltration rate, pH, total soluble salts, sodium, and percent organic matter. To conserve water quality it is critical that at least nitrogen, phosphorus, and potash be included in the analysis. Calcium, magnesium, sulfur, and iron should also be required. Without this information landscape managers cannot know how to appropriately fertilize and amend the soil. The result can lead to water contamination. There also needs to be a requirement that the recommendations recommend the use of soil regenerative products that would include organic fertilizers and soil conditioners while discouraging or excluding the use of water soluble fertilizers that have the potential to pollute ground and surface waters.

Your document should state that the soil management report shall discuss what products and practices will be used to improve soil biology diversity and stability, soil structure, water penetration and permeability, water holding capacity, nutrient holding capacity, carbon sequestration while minimizing runoff, the use of synthetic water soluble fertilizers and toxic pesticides.

Section 4 requires documentation showing implementation of soil analysis report recommendations. If there are no guidelines for the recommendations (as I suggested above) they could be inappropriate and result in loss of soil quality, reducing water absorption, encouraging runoff, water loss and environmental contamination.

§ 492.6 Landscape Design Plan.

In section a-1-D it states "Turf is not allowed on slopes greater than 25% where the toe of the slope is adjacent to an impermeable hardscape." It would be a good idea to suggest if not require where turf is greater than X% (2 or 5) that a swale or rain garden be installed at the bottom of the slope to hold rain and irrigation water allowing it to penetrate into the soil while avoiding runoff. It would also be a good idea to require that turf be set back from impermeable surfaces by X feet (5?) to help minimize overspray and runoff.

Section a-1-I, common interest developments need to include Home Owner Associations so HOA's cannot continue to require the use of lawns in front yards.

In section (a-3) Soil Preparation, Mulch and Amendments it is important that you define compost. There is a lot of horrible materials being sold as compost that when added to the soil will cause nothing but problems. This could be due to contamination (glass, nails etc. as found in poor quality urban landscape greenwaste compost) or from materials not fully composted with an inappropriate C:N ratio (25-30:1 is desired and should be stated in your documentation). This section also says to follow the recommendations from the soil analysis but without guidelines for those doing the analysis improper or inadequate recommendations could easily result. Also some guidelines regarding the incorporation

of soil amendments needs to be included. Soil cultivation destroys soil biology and structure reducing water infiltration and percolation creating runoff. It should be clearly stated that soil disturbance should be minimized when working in quality compost. I agree with subsection G that post-consumer material, should be considered over other materials, when that material has been properly screened and processed so it is free of "trash." It might be a good idea that post-consumer materials be routinely tested for herbicide residue to make sure when used will not kill installed plants. These products should also have their C:N ratio routinely tested to insure they are within acceptable levels (as suggested above).

Section b-7 states, "identify soil amendments, type, and quantity." It should also include fertilizers or have a different line include identify fertilizers.